



WHAT IS CLAIMED IS:

1. An electronic device having an imaging part which catches an image obtained through an optical system, and a focusing mechanism which moves said optical system to an auto-focusing position or a fixed focus position, comprising:

a switch that functions as a focusing switch ordering said focusing mechanism a focusing action and also functions as a shutter switch ordering taking of an image caught by said imaging part, said switch ordering the focusing action or the taking of the caught image by being operated; and

a control part that, in the case in which a shutter operation of said switch is performed during the focusing action of said focusing mechanism due to said switch, switches said optical system to said fixed focus position from said auto-focusing position and takes a fixed focus image.

2. The electronic device of claim 1, wherein said control part compares between a time required for bringing into focus in said focusing mechanism and a time from starting of the focusing action until starting of said shutter operation, and changes said optical system to said auto-focusing position or said fixed focus position based on a result of the comparison.

3. The electronic device of claim 1, wherein said switch is provided as a first switch, and a switch which is used in photographing by a fixed focus is also provided as a second switch separated from the first switch.

4. The electronic device of claim 1, wherein said switch functions as said focusing switch at a state of a half-push and functions as said shutter switch at a state of a full-push.

5. The electronic device of claim 1 further comprising:

a first housing part that has said imaging part;  
a second housing part that has said switch; and  
a coupling part that couples said first housing part  
and said second housing part so that the first and second  
housing parts can be folded up.

6. An electronic device having an imaging part which  
catches an image obtained through an optical system, and  
a focusing mechanism which moves said optical system to  
an auto-focusing position or a fixed focus position,  
comprising:

a switch that functions as a focusing switch ordering  
said focusing mechanism a focusing action and also functions  
as a shutter switch ordering taking of an image caught by  
said imaging part, said switch ordering the focusing action  
or the taking of the caught image according to a condition  
of operation; and

a control part that, in the case in which a shutter  
operation of said switch is performed during the focusing  
action of said focusing mechanism due to said switch, takes  
an image, at a focus position in the middle of the focusing  
action, which is caught by said imaging part.

7. The electronic device of claim 6, wherein said switch  
is provided as a first switch, and a switch which is used  
in photographing by a fixed focus is also provided as a  
second switch separated from the first switch.

8. The electronic device of claim 6, wherein said switch  
functions as said focusing switch at a state of a half-push  
and functions as said shutter switch at a state of a  
full-push.

9. The electronic device of claim 6 further comprising:  
a first housing part that has said imaging part;  
a second housing part that has said switch; and

a coupling part that couples said first housing part and said second housing part so that the first and second housing parts can be folded up.

10. A photographing control method of an electronic device having an imaging part which catches an image obtained through an optical system, and a focusing mechanism which moves said optical system to an auto-focusing position or a fixed focus position, comprising:

a process that detects a shutter operation in the middle of a focusing action of said focusing mechanism;

a process that detects said shutter operation and switches to said fixed focus position from said auto-focusing position of said optical system under the focusing action; and

a process that takes a fixed focus image caught at said fixed focus.

11. The photographing control method of the electronic device of claim 10 further including a process that superimposes a focusing mark representative of a distance between a pictured object and the optical system on an image, in the middle of said focusing action, which is caught by said imaging part, and displays it.

12. A photographing control method of an electronic device having an imaging part which catches an image obtained through an optical system, and a focusing mechanism which moves said optical system to an auto-focusing position or a fixed focus position, comprising:

a process that detects a shutter operation in the middle of a focusing action of said focusing mechanism; and

a process that detects said shutter operation and takes an auto-focusing image caught by said imaging part in the middle of the focusing action.

13. A photographing control program of an electronic

device having an imaging part which catches an image obtained through an optical system, and a focusing mechanism which moves said optical system to an auto-focusing position or a fixed focus position, comprising:

a step that detects a shutter operation in the middle of a focusing action of said focusing mechanism;

a step that detects said shutter operation and switches to said fixed focus position from said auto-focusing position of said optical system under the focusing action; and

a step that takes a fixed focus image caught at said fixed focus.

**44.** A photographing control program of an electronic device having an imaging part which catches an image obtained through an optical system, and a focusing mechanism which moves said optical system to an auto-focusing position or a fixed focus position, comprising:

a step that detects a shutter operation in the middle of a focusing action of said focusing mechanism; and

a step that detects said shutter operation and takes an auto-focusing image caught by said imaging part in the middle of the focusing action.

**45.** An integrated circuit to which an imaging part catching an image obtained through an optical system and a focusing mechanism moving said optical system to an auto-focusing position or a fixed focus position are connected externally, comprising:

a detection part that detects a shutter operation in the middle of a focusing action of said focusing mechanism; and

a control part that, on the basis of a detection of said detection part, switches to said fixed focus position from said auto-focusing position of said optical system under the focusing action and takes a fixed focus image

caught at said fixed focus.

16. An integrated circuit to which an imaging part catching an image obtained through an optical system and a focusing mechanism moving said optical system to an auto-focusing position or a fixed focus position are connected externally, comprising:

a detection part that detects a shutter operation under a focusing action of said focusing mechanism; and

a control part that takes an auto-focusing image in the middle of the focusing action based on a detection of said shutter operation of said detection part.